I CLAIM:

1. A fuel injection nozzle for an internal combustion engine, the injection nozzle comprising

a nozzle body (3) protruding into the combustion chamber,

two coaxial nozzle needles (5, 7), the outer nozzle needle (5) being guided in the nozzle body (3),

a second nozzle needle seat in the nozzle body (3) for the outer nozzle needle (5), and

a first nozzle needle seat for the inner nozzle needle (7),

the inner nozzle needle (7) being guided in the outer nozzle needle (5), and

the first nozzle needle seat (21) being disposed in the outer nozzle needle (5).

2. The fuel injection nozzle in accordance with claim 1, further comprising a first pressure chamber (25) in the outer nozzle needle (25), the chamber (25) cooperating with a first pressure shoulder (23) of the inner nozzle needle (7),

the first pressure chamber (25) being acted upon, at least indirectly, with the pressure of a common rail (114) via a supply bore (27) in the outer nozzle needle (5).

3. The fuel injection nozzle in accordance with claim 1, the inner nozzle needle (7), with its end (29) remote from the combustion chamber, defines a first control chamber (31), present in the outer nozzle needle (5), and a closure element (11, 11a, 11b) cooperating with the outer nozzle needle (5) defines the first control chamber (31) on the other end.

4. The fuel injection nozzle in accordance with claim 2, the inner nozzle needle (7), with its end (29) remote from the combustion chamber, defines a first control chamber (31), present in the outer nozzle needle (5), and a closure element (11, 11a, 11b) cooperating with the outer nozzle needle (5) defines the first control chamber (31) on the other end.

5. The fuel injection nozzle in accordance with claim 3, wherein the diameter (D3) of the inner nozzle needle (7), on its end (29) remote from the combustion chamber, is greater than the diameter (D2) of the first pressure shoulder (23) of the inner nozzle needle (7).

6. The fuel injection nozzle in accordance with claim 3, wherein the diameter (D3) of the inner nozzle needle (7), on its end (29) remote from the combustion chamber, is equal to the diameter (D2) of the first pressure shoulder (23) of the inner nozzle needle (7).

7. The fuel injection nozzle in accordance with claim 3, further comprising a closing spring (73) in the first control chamber (31), the closure spring (73) being braced on one end on the inner nozzle needle (7) and on the other on the closure element (11).

8. The fuel injection nozzle in accordance with claim 5, further comprising a closing spring (73) in the first control chamber (31), the closure spring (73) being braced on one end on

the inner nozzle needle (7) and on the other on the closure element (11).

9. The fuel injection nozzle in accordance with claim 6, further comprising a closing spring (73) in the first control chamber (31), the closure spring (73) being braced on one end on the inner nozzle needle (7) and on the other on the closure element (11).

10. The fuel injection nozzle in accordance with claim 3, wherein the first control chamber (31) is supplied with fuel from the common rail (114) via a first inlet throttle (33); and wherein the first control chamber (31) communicates hydraulically with a fuel return (15) via a first outlet throttle (35) and via a first multi-way valve, in particular a 2/2-way valve (37).

11. The fuel injection nozzle in accordance with claim 10, wherein the first inlet throttle (33) is disposed in the closure element (11) or in the outer nozzle needle (5).

12. The fuel injection nozzle in accordance with claim 7, wherein the first outlet throttle (35) is disposed in the closure element (11).

13. The fuel injection nozzle in accordance with claim 11, wherein the first outlet throttle (35) is disposed in the closure element (11).

14. The fuel injection nozzle in accordance with claim 1, wherein the outer nozzle needle (5), with its end (47) remote from the combustion chamber, defines a second control chamber (49), present in the nozzle body (3), on one end, and wherein the closure element (11) defines the second control chamber (49) on the other end.

15. The fuel injection nozzle in accordance with claim 14, wherein the second control chamber (49) is supplied with fuel from the common rail (114) via a second inlet throttle (51); and wherein the second control chamber (49) communicates hydraulically with the fuel return (15) via a second outlet throttle and via a second multi-way valve, in particular a 2/2-way valve (55).

16. The fuel injection nozzle in accordance with claim 10, wherein the second control chamber (49) is supplied with fuel from the common rail (114) via the supply bore (27), the first control chamber (31), and the second inlet throttle (51); wherein the second control chamber (49) communicates hydraulically with the fuel return (15) via the second outlet throttle (53) and via the second multi-way valve, in particular a 2/2-way valve (55); and wherein the first pressure chamber (25) can be acted upon by a pressure which is greater than the pressure in the common rail (114).

17. The fuel injection nozzle in accordance with claim 16, further comprising a hydraulic pressure booster (57) between the common rail (114) and the first pressure chamber (25); the

pressure booster (57) including a low-pressure chamber (61) (57) communicating hydraulically with the common rail (114) and a high-pressure chamber (63) communicating hydraulically with the first pressure chamber (25), and a diversion chamber (69) of the which can be made to communicate with either the common rail (114) or the fuel return (15) via a 3/2-way valve (71).

18. The fuel injection nozzle in accordance with claim 17, further comprising a hydraulic communication with a check valve (67) between the common rail (114) and the high-pressure chamber (63) of the pressure booster (57).

19. The fuel injection nozzle in accordance with claim 16, wherein the second inlet throttle (51) is disposed in the closure element (11).

20. The fuel injection nozzle in accordance with claim 16, wherein the multi-way valves (37, 55, 71) are actuated by an electromagnet or a piezoelectric actuator.